

To: Gregory Oberley/R8/USEPA/US@EPA[]
From: (b) (6)
Sent: Tue 1/15/2013 10:09:18 PM
Subject: Sediment samples from Pavillion deep monitoring wells

Mr. Oberley,

My name is Jessica Dehart, I'm a Master's candidate in Environmental Engineering at University of Colorado, Boulder and an EPA Science to Achieve Results (STAR) 2012 Fellow. For my STAR Fellowship research, I am studying the fate and transport of several organic compounds frequently used in hydraulic fracturing fluids. Briefly, I'll be using large scale (1 m length) column tests to measure retardation coefficients and degradation half lives for 6-8 compounds in the event of a release above the target formation, such as the case of insufficient well casing. Currently I'm trying to acquire sediment samples to use in my column tests.

I was curious if there were any cores or cuttings available from the two deep monitoring wells implemented for the Pavillion study? Does the EPA store any cores or cuttings that I could use as an aquifer sediment sample? Ideally I'm looking for a sediment sample from the Arapahoe aquifer in the Denver basin aquifer system, but I'm very open to other available opportunities. I've checked in with the USGS Core Research Center, and they have two Denver basin cores but unfortunately the sample sizes I am looking for are significantly larger than what I could acquire from them. I'm looking for at least 0.05 cubic meters worth of sediment samples, equivalent to approximately 1.75 cubic feet.

Thank you for your time,

Jessica Dehart

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